India's International Trade of Four Specific Commodities in the Recent Past Some Insights

Preface

The study uses trade indicators to analyse merchandise export and import data in a way that should be useful for the purpose of policy. The indicators provide a glimpse of the trade patterns of the world and the performance of India in comparison to various other countries. They have been used in the case of India's exports of **Embroidery in the piece and Bed Linen, Table Linen etc.** and imports of **Polyamide in Primary Forms and Perfumes or Toilet water** to indicate the possible directions policy may take.

The data used in this study has been sourced from the Export Import Data Bank of the DGCI&S, Department of Commerce, and Government of India and from the United Nations Comtrade Database. Introduction notes of each commodities has been sourced from the various sights –viz Wikipedia, Britannica, The Economic Times etc.

Computations are based on data at ITC-HS four-digit level (ITC-HS Code-5810 & 6302 for export and 3908 & 3303 for import) and the latest finalized data available on the UN Comtrade Database up to year 2022 and on the DGCI&S Database up to July'2023. So, trends from 2019 to 2022 have been shown when we extract the data from UN Comtrade and from 2019 to 2022 have been shown when we extract the data from DGCIS Data base.

In this report, we will see various analysis and aspects of India's Precious as well as International export trade of Embroidery in the piece and Bed Linen, Table Linen etc. and imports of Polyamide in Primary Forms and Perfumes or Toilet water. We will use both the 4 digit Commodity codes.

Trends in India's as well as International Trade i.e. Exports and Imports of above four Commodities are given below in different tables :

- Table 1 : India's top 10 Export destination of Embroidery in the piece with their shares in percentage.
- Table 2 : World's top 10 Exporters of Embroidery in the piece with their shares in percentage.
- Table 3 : World's top 10 Importers of Embroidery in the piece with their shares in percentage.
- Annex- I : Top 3 sources of Embroidery in the piece of World's top 3 Importers.
- Table 4 : India's top 10 destination of Bed Linen, Table Linen etc with their shares in percentage.
- Table 5 : World's top 10 Exporters of Bed Linen, Table Linen etc with their shares in percentage.
- Table 6 : World's top 10 Importers of Bed Linen, Table Linen etc with their shares in percentage.
- Annex-II : Top 3 sources of Bed Linen, Table Linen etc of World's top 3 Importers.
- Table 7 : India's top10 Sources of Polyamide in Primary Forms with their shares in percentage.
- Table 8 : World's top 10 Importers of Polyamide in Primary Forms with their shares in percentage.
- Table 9 : India's top 10 Sources of Perfumes or Toilet water with their shares in percentage.
- Table 10 : World's top 10 Importers of Perfumes or Toilet water with their shares in percentage.

1 EXPORT Embroidery in the piece

Embroidery, art of decorating material, primarily textile fabric, by means of a needle and thread (and sometimes fine wire). The basic techniques include crewel work, needlepoint, crossstitch embroidery, and quilting, as well as quillwork and featherwork. Ancient Egyptian tomb paintings show that clothes, couch covers, hangings, and tents were so decorated. Quilting was known to the ancient Persians and, at the time of the Battle of Marathon (490 bce), quilted garments were worn as armour; Greek vase paintings show these quilted suits covered with embroidery. Greeks depicted on vases from the 7th and 6th centuries bce and later are dressed in embroidered garments. In India embroidery was also an ancient craft, but it is from the Mughal period (from 1556) that numerous examples have survived, many finding their way to Europe from the late 17th to the early 18th century through the East India trade. Stylized plant and floral motifs, notably the flowering tree, influenced English embroidery. The Dutch East Indies also produced silk embroideries in the 17th and 18th centuries. In Islamic Persia, examples survive from the 16th and 17th centuries, when embroideries show geometric patterns far removed by stylization from the animal and plant shapes that inspired them, owing to the Qur'ān's proscription of depicting living forms. In the 18th century these gave way to less severe, though still formal, flowers, leaves, and stems. In the 18th and 19th centuries a sort of patchwork called Resht was produced. Of the Middle Eastern work in the first half of the 20th century, there is a colourful peasant embroidery made in Jordan. In western Turkestan, Bokhara work with floral sprays in bright colours was done on covers in the 18th and 19th centuries.

Embroidery can be classified according to what degree the design takes into account the nature of the base material and by the relationship of stitch placement to the fabric. The main categories are free or surface embroidery, counted-thread embroidery, and needlepoint or canvas work. In free or surface embroidery, designs are applied without regard to the weave of the underlying fabric. Examples include crewel and traditional Chinese and Japanese embroidery. Counted-thread embroiderypatterns are created by making stitches over a predetermined number of threads in the foundation fabric. Counted-thread embroidery is more easily worked on an evenweave foundation fabric such as embroidery canvas, aida cloth, or specially woven cotton and linen fabrics. Examples include cross-stitch and some forms of blackwork embroidery. While similar to counted thread in regards to technique, in canvas work or needlepoint, threads are stitched through a fabric mesh to create a dense pattern that completely covers the foundation fabric.Examples of canvas work include bargello and Berlin wool work. Embroidery can also be classified by the similarity of its appearance. In drawn thread work and cutwork, the foundation fabric is deformed or cut away to create holes that are then embellished with embroidery, often with thread in the same color as the foundation fabric. When created with white thread on white linen or cotton, this work is collectively referred to as whiteworkHowever,whitework can either be counted or free. Hardanger embroidery is a counted embroidery and the designs are often geometric. Conversely, styles such as Broderieanglaise are similar to free embroidery, with floral or Abstract art that are not dependent on the weave of the fabric.

A needle is the main stitching tool in embroidery, and comes in various sizes and types. The fabrics and yarns used in traditional embroidery vary from place to place. Wool, linen, and silk have been in use for thousands of years for both fabric and yarn. Today, embroidery thread is manufactured in cotton, rayon, and novelty yarns as well as in traditional wool, linen, and silk. Ribbon embroidery uses narrow ribbon in silk or silk/organza blend ribbon, most commonly to create floral motifs. The development of machine embroidery and its mass production came about in stages during the Industrial Revolution. Contemporary embroidery is stitched with a computerized embroidery machine using patterns digitized with embroidery software.

These are broadly classified under H.S. Code-5810.

	India's Top To destination of Embroidery in the piece (H.S Code-5810)									
Rank	Countries	2019)	2020	2020		2021		r	
		Value	Share	Value	Share	Value	Share	Value	Share	
		(million\$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)	
1.	Italy	44.06	18.10	24.19	12.92	27.39	13.69	42.13	26.02	
2.	Senegal	23.99	9.86	20.30	10.85	32.66	16.32	22.89	14.14	
3.	Nigeria	24.40	10.03	32.71	17.47	24.66	12.32	12.98	8.02	
4.	U S A	11.02	4.53	6.64	3.55	10.26	5.13	11.68	7.22	
5.	UAE	28.76	11.82	23.44	12.52	14.33	7.16	11.26	6.96	
6.	France	12.17	5.00	7.59	4.06	7.98	3.99	10.28	6.35	
7.	Togo	17.73	7.28	20.20	10.79	21.20	10.59	7.09	4.38	
8.	UK	9.29	3.82	4.74	2.53	4.72	2.36	6.21	3.84	
9.	Gambia	13.47	5.53	16.13	8.62	14.22	7.11	4.26	2.63	
10.	Turkey	4.70	1.93	3.00	1.60	1.60	0.80	3.00	1.85	
	Others	53.80	22.10	28.26	15.09	41.07	20.53	30.10	18.59	
	Total	243.39	100	187.21	100	200.10	100	161.88	100	

 Table - 1

 India's Top 10 destination of Embroidery in the piece (H.S Code-5810)

Source: DGCI&S.

Note : India's Export including re-export

Leading importers of Embroidery in the Piece from India from 2019-2022(**in million USD**) Data label given on the basis of 2022



India's top 5 destinations of Embroidery in the Piece by percentage India in 2022:



Embroidery in the piece is exported to over 160 countries from India. In the year 2022, India has exported the same worth value of US \$ 161.88 Million, showing the decline of more than 19.90% compared to the year 2021. Italy was the largest market for Embroidery in the piece export from India, in 2022, Italy imported US \$ 42.13Million of Embroidery in the piece from India which was 26.023% share of India's total export. It was followed by Senegal and Nigeria with 14.14 % and 8.02% share. The top 10 countries in total shared the share of 81.41% of total export from India.

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	world's	1 op 10 expo	rter of E	mbroldery	in the p	lece (H.S C	0ae-581(<u>))</u>	
Rank	Countries	2019		202	0	202	1	2022	2
		Value	Share	Value	Share	Value	Share	Value	Share
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)
1.	China	934.83	50.19	604.28	47.74	963.13	55.34	1236.31	66.72
2.	India	244.21	13.11	186.26	14.71	199.79	11.48	161.67	8.73
3.	Türkiye	87.92	4.72	73.80	5.83	82.14	4.72	75.25	4.06
4.	Hongkong	82.84	4.45	52.86	4.18	67.29	3.87	52.17	2.82
5.	Austria	33.82	1.82	26.80	2.12	37.20	2.14	38.13	2.06
6.	France	42.41	2.28	24.16	1.91	34.42	1.98	37.36	2.02
7.	Italy	39.61	2.13	25.12	1.98	27.71	1.59	34.99	1.89
8.	Switzerland	32.47	1.74	23.54	1.86	30.68	1.76	33.94	1.83
9.	Spain	17.55	0.94	9.98	0.79	15.56	0.89	29.63	1.60
10.	Germany	30.15	1.62	23.39	1.85	27.31	1.57	23.66	1.28
	Others	316.79	17.01	215.61	17.03	255.14	14.66	129.77	7.00
	Total	1862.61	100	1265.80	100	1740.38	100	1852.87	100

3 Table-2 World's Top 10 exporter of Embroidery in the piece (H.S. Code 5810)

Source: UN Comtrade

World's Leading Exporters of Embroidery in the piece from 2019 to 2022(**in million USD**) Data label given on the basis of 2022



Country wise world's top 5 exporter of Embroidery in the piece by percentage in 2022 :



In the year 2022, the world exports of Embroidery in the piece exceeded US \$ 1.85 billion, down from US \$ 1.74 Billion in 2021. China was the top exporter of Embroidery in the piece, exported at about US \$ 1.24 Billion, accounted 66.72% share of world export in 2022. **India** was the 2^{nd} largest exporter of Embroidery in the piece in the world, exported US \$ 161.67 Million, accounted 8.73% share of world export in the same year. It was followed by Turkey, exported US \$ 75.25 Million the same in that year at 4.06% of world.

	world's top to importers of Embrodery in the piece (II.5 Code-5010)								
Rank	Countries	2019		2020)	2021		2022	
		Value	Share	Value	Share	Value	Share	Value	Share
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)
1.	USA	101.44	10.49	71.99	12.25	99.92	13.64	116.81	14.25
2.	Kyrgyzstan	20.78	2.15	3.82	0.65	13.00	1.78	97.56	11.90
3.	Italy	87.54	9.05	52.54	8.94	51.17	6.99	71.69	8.74
4.	France	52.51	5.43	32.40	5.51	41.10	5.61	52.84	6.44
5.	Brazil	21.11	2.18	14.49	2.47	19.44	2.65	49.25	6.01
6.	Türkiye	95.08	9.83	26.41	4.49	22.33	3.05	37.85	4.62
7.	Spain	25.15	2.60	12.40	2.11	15.53	2.12	36.82	4.49
8.	Morocco	28.68	2.96	18.54	3.15	31.64	4.32	30.95	3.77
9.	Hong Kong	53.22	5.50	43.20	7.35	54.00	7.37	30.16	3.68
10.	Germany	30.34	3.14	24.69	4.20	28.11	3.84	26.26	3.20
18.	India	10.50	1.08	5.38	0.92	9.07	1.24	11.45	1.40
	Others	441.08	45.59	281.86	47.96	347.16	47.40	258.19	31.49
	Total	967.41	100	587.72	100	732.45	100	819.83	100

World's top 10 Importers of Embroidery in the piece (H.S Code-5810)

Source : UN Comtrade

Leading Embroidery in the piece importers of world from 2019 to 2022 (Values in million USD) Data label given on the basis of 2022



Country wise world's leading importers of Embroidery in the piece by percentage in 2022



Global import of Embroidery in the piece cost a total US\$ 819.83Million in 2022. In that year, imported of the commodity appreciated by 11.93% from the year 2021. USA consumed the highest dollar worth of imported Embroidery in the piece during 2022 with purchases valued at US \$ 116.81Million or 14.25% of the world total. In second and third place were Kyrgyzstan and Italy at 11.90 % and 8.74 % of globally imported of Embroidery in the piece in 2022. In that year **India's** share only 1.40% of world total import value of Embroidery in the piece.

4 Table-3



i) Top 3 Sources of Embroidery in the piece to USA in 2022 by percentage:

USA imports most of its requirements of Embroidery in the piece from China with 29.26 % share of USA's total import in 2022. In the same year **India** exported 18.50% share of Embroidery in the piece to USA and holds the 2nd major source country of the commodity to USA which was followed by Mexico (13.29%).(**Source : UN Comtrade**)

ii) Top 3 Sources of Embroidery in the piece to Kyrgyzstan in 2022 by percentage:



Embroidery in the piece market of Kyrgyzstan totally controlled by China. In 2022 Kyrgyzstan had Import 99.87% share of its total import of Embroidery in the piece from China. It also imported the same from Tturkiye (0.07%), from Uzbekistan (0.06%) and from India (0.01%) of its total import respectively. **Source : UN Comtrade**)

iii) Top 3 Sources of Embroidery in the piece to Italy in 2022 by percentage:



India was the primary source country of Embroidery in the piece to Italy in 2022, exported more than 54.30% share of Italy's total import in 2022 which was followed by China (24 %) and France (7.60%). (Source: UN Comtrade)

Linen is a textile made from the fibers of the flax plant. Linen is very strong, absorbent, and dries faster than cotton. Because of these properties, linen is comfortable to wear in hot weather and is valued for use in garments. It also has other distinctive characteristics, notably its tendency to wrinkle.

Linen textiles appear to be some of the oldest in the world; their history goes back many thousands of years. Dyed flax fibers found in a cave in South-eastern Europe (present-day Georgia) suggest the use of woven linen fabrics from wild flax may date back over 30,000 years. Linen was used in ancient civilizations including Mesopotamia and ancient Egypt, and linen is mentioned in the Bible. In the 18th century and beyond, the linen industry was important in the economies of several countries in Europe as well as the American colonies.

Textiles in a linen weave texture, even when made of cotton, hemp, or other non-flax fibers, are also loosely referred to as "linen".

Many products can be made with linen: aprons, bags, towels (swimming, bath, beach, body and wash towels), napkins, bed linens, tablecloths, runners, chair covers, and men's and women's wear. Linen fabric has been used for table coverings, bed coverings and clothing for centuries. The significant cost of linen derives not only from the difficulty of working with the thread but also because the flax plant itself requires a great deal of attention. In addition, flax thread is not elastic, and therefore it is difficult to weave without breaking threads. Thus linen is considerably more expensive to manufacture than cotton.

Over the past 30 years the end use for linen has changed dramatically. Approximately 70% of linen production in the 1990s was for apparel textiles, whereas in the 1970s only about 5% was used for fashion fabrics.

Linen uses range across bed and bath fabrics (tablecloths, bath towels, dish towels, bed sheets); home and commercial furnishing items (wallpaper/wall coverings, upholstery, window treatments); apparel items (suits, dresses, skirts, shirts); and industrial products (luggage, canvases, sewing thread).^[40] It was once the preferred yarn for hand-sewing the uppers of moccasin-style shoes (loafers), but has been replaced by synthetics.

Nowadays, linen is one of the most preferred materials for bed sheets due to its durability and hypoallergenic properties. Linen can be up to three times stronger than cotton. This is because the cellulose fibers in linen yarn are slightly longer and wrapped tighter than those found in cotton yarn. This gives it great durability and allows linen products to be long-lasting.

Linen is also used extensively by artisan bakers. Known as a couche, the flax cloth is used to hold the dough into shape while in the final rise, just before baking. The couche is heavily dusted with flour which is rubbed into the pores of the fabric. Then the shaped dough is placed on the couche. The floured couche makes a "non stick" surface to hold the dough. Then ridges are formed in the couche to keep the dough from spreading.

Flax is grown in many parts of the world, but top quality flax is primarily grown in Western European countries and Ukraine. In recent years bulk linen production has moved to Eastern Europe and China, but high-quality fabrics are still confined to niche producers in Ireland, Italy and Belgium, and also in countries including Poland, Austria, France, Germany, Sweden, Denmark, Belarus, Lithuania, Latvia, the Netherlands, Spain, Switzerland, Britain and Kochi in India. High-quality linen fabrics are now produced in the United States for the upholstery market and in Belgium.

These are broadly classified under H.S. Code-6302.

	mula's rop to destination of Ded Linell, rable Linell etc (H.S Code-0502)										
Rank	Countries	2019	9	2020	2020		2021		r		
		Value	Share	Value	Share	Value	Share	Value	Share		
		(million\$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)		
1.	U S A	975.69	61.52	919.56	64.60	1585.41	69.66	1371.34	67.10		
2.	Canada	53.31	3.36	49.30	3.46	74.39	3.27	73.76	3.61		
3.	Australia	43.03	2.71	45.70	3.21	62.15	2.73	71.37	3.49		
4.	UK	82.26	5.19	67.07	4.71	70.35	3.09	69.74	3.41		
5.	Germany	60.12	3.79	46.74	3.28	71.31	3.13	67.60	3.31		
6.	Netherland	29.62	1.87	28.84	2.03	33.54	1.47	35.93	1.76		
7.	Israel	17.70	1.12	17.70	1.24	30.16	1.33	30.78	1.51		
8.	UAE	27.40	1.73	20.22	1.42	28.31	1.24	30.45	1.49		
9.	France	17.84	1.13	16.55	1.16	33.93	1.49	23.64	1.16		
10.	Mexico	15.34	0.97	15.67	1.10	22.77	1.00	22.35	1.09		
	Others	263.54	16.62	196.20	13.78	263.47	11.58	246.89	12.08		
	Total	1585.85	100	1423.55	100	2275.77	100`	2043.85	100		

India's Top 10 destination of Bed Linen, Table Linen etc (H.S Code-6302)

Source: DGCI&S.

Note : India's Export including re-export

Top importers of Bed Linen, Table Linen etc. from India from 2019-2022(Values in million USD) Data label given on the basis of 2022



India's top 5 destinations of Bed Linen, Table Linen etc.. by percentage India in 2022:



Bed Linen, Table Linen etc.. is exported to near about 200 countries from India in 2022. In that year, India has exported Bed Linen, Table Linen etc. worth of US \$ 2.04 Billion, showing the decline of more than 10.20 % compared to the year 2021. USA was the largest market for Linen Fabrics export from India, in 2022, USA imported US \$ 1.37 Billion worth Bed Linen, Table Linen etc.. from India which was almost 67.10% share of India's total export. It was distantly followed by Canada and Australia with 3.61% and 3.49% share. The top 10 countries in total shared the share of 88% of the Bed Linen, Table Linen etc. export value from India.

7 Table - 1

	<u>World's Top TU exporter of Bed Linen, Table Linen etc (H.S Code-6302)</u>											
Rank	Countries	2019		202	0	202	1	202	2			
		Value	Share	Value	Share	Value	Share	Value	Share			
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)			
1.	China	8126.40	41.88	7653.01	41.65	9889.55	41.38	9611.06	52.58			
2.	India	1585.92	8.17	1422.14	7.74	2276.39	9.53	2037.75	11.15			
3.	Türkiye	1199.28	6.18	1168.72	6.36	1453.31	6.08	1353.01	7.40			
4.	Germany	731.43	3.77	712.83	3.88	821.91	3.44	781.71	4.28			
5.	Portugal	557.41	2.87	534.83	2.91	725.91	3.04	649.11	3.55			
6.	Netherlands	278.16	1.43	290.28	1.58	376.91	1.58	363.79	1.99			
7.	France	307.06	1.58	244.17	1.33	306.29	1.28	328.23	1.80			
8.	Poland	257.55	1.33	311.21	1.69	373.11	1.56	327.42	1.79			
9.	Spain	279.41	1.44	220.75	1.20	277.46	1.16	312.13	1.71			
10.	Italy	228.32	1.18	187.57	1.02	269.59	1.13	281.98	1.54			
	Others	5855.14	30.17	5630.08	30.64	7127.03	29.82	2232.80	12.22			
	Total	19406.09	100	18375.59	100	23897.47	100	18278.99	100			

8 Table-2 World's Top 10 exporter of Bed Linen, Table Linen etc (H S Code-6302)

Source: UN Comtrade

World's Top Exporters of Bed Linen, Table Linen etc from 2019 to 2022 (in million USD) Data label given on the basis of 2022



Country wise world's top 5 exporter of Bed Linen, Table Linen etc by percentage in 2022 :



In 2022, the world exports value of Bed linen, table linen, toilet linen and kitchen linen was US \$ 18.28 billion, down by 23.51% from the year in 2021. China was the top exporter of Bed linen, table linen, toilet linen and kitchen linen exported at about US \$ 9.61 Billion, accounted 52.58% share of world export in 2022. The **India** Remains the Second Largest Global Exporter of Bed linen, table linen, toilet linen and kitchen linen, with a worth value of US \$ 2.04 Billion, comprising 11.15% share of world exports in 2022 It was followed by Turkiye, exported the same in that year at about US \$ 1.35 Billion or 7.40% of world.

				Table-3					
	World's top 1	10 Importers	s of Bed	l Linen, Tal	ole Line	en etc (H.S C	Code-6	<u>302)</u>	
Rank	Countries	2019		2020	2020			2022	
		Value	Share	Value	Share	Value	Share	Value	
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	

		Value	Share	Value	Share	Value	Share	Value	Share
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)
1.	USA	5980.91	32.74	5496.86	32.89	7568.37	35.37	6982.63	34.10
2.	Germany	1510.72	8.27	1526.55	9.13	1775.77	8.30	1884.96	9.21
3.	France	1012.98	5.55	913.74	5.47	1171.91	5.48	1244.91	6.08
4.	Japan	1126.53	6.17	971.28	5.81	1050.20	4.91	1174.57	5.74
5.	UK	1063.99	5.82	938.51	5.61	1124.62	5.26	1105.66	5.40
6.	Australia	545.19	2.98	579.69	3.47	727.58	3.40	777.44	3.80
7.	Canada	499.40	2.73	441.69	2.64	600.87	2.81	644.78	3.15
8.	Netherlands	516.25	2.83	537.32	3.21	730.77	3.42	620.59	3.03
9.	Italy	457.94	2.51	396.47	2.37	553.07	2.58	618.61	3.02
10.	Spain	445.62	2.44	363.84	2.18	479.05	2.24	597.91	2.92
65.	India	7.24	0.04	4.11	0.02	6.91	0.03	10.37	0.05
	Others	5099.56	27.92	4544.81	27.19	5606.40	26.20	4812.54	23.50
	Total	18266.33	100	16714.87	100	21395.53	100	20474.96	100

Source : UN Comtrade

Leading Bed Linen, Table Linen etc. importers of world from 2019 to 2022 (Values in million USD) Data label given on the basis of 2022



Country wise world's leading importers of Bed Linen, Table Linen etc. by percentage in 2022



Global purchases of imported Bed Linen, Table Linen etc. cost a total US \$ 20.47 billion in 2022. In that year, imported of the commodity depreciated by 4.30% from US \$ 21.39 billion during 2021. USA consumed the highest dollar worth of imported Bed Linen, Table Linen etc. during 2022 with purchases valued at US \$ 6.98 billion or 34.10% of the world total. In second and third place were Germany (US \$ 1.88 B) and France(US \$ 1.24 B) at 9.21% and 6.08% respectively of globally imported Bed Linen, Table Linen etc. in 2022. In that year **India**'s share only 0.05% of world total import value of Bed Linen, Table Linen etc.

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10 Annexure-1 Sources of world's top 3 importers of Bed Linen, Table Linen etc (H.S Code-6302)

i) Top 3 Sources of Bed Linen, Table Linen etc... to USA in 2022 by percentage:



USA imports most of its requirements of Bed Linen, Table Linen etc.. from China with 34.22 % share of USA's total import in 2022. **India** exports 32.98% share to USA in the same year and hold the 2nd major source country of the commodity to USA & Pakistan was in the 3rd position with export of 19.11% share of USA's total import.**(Source : UN Comtrade)**

ii) Top 3 Sources of Bed Linen, Table Linen etc. to Germany in 2022 by percentage:



30.07% of Bed Linen, Table Linen etc.. Imports of Germany comes from Pakistan in 2022, followed by Turkey (21.13%) and China (14.44%). In the same year **India** exported 7.84% of Linen, Table Linen etc.. to Germany **.Source : UN Comtrade**)

iii) Top 3 Sources of Bed Linen, Table Linen etc... to France in 2022 by percentage:



France's 3 major source countries of Bed Linen, Table Linen etc.. in 2022 were Pakistan (24.95%), Belgium (11.96%) and China (9.09%) in 2022. **India** is also suit as a source of Bed Linen, Table Linen etc. to France, exports 5.22% share of France's total import of the commodity in 2022. **(Source: UN Comtrade)**

11 IMPORT Polyamide in Primary Forms

A **polyamide** is a polymer with repeating units linked by amide bonds. Polyamides occur both naturally and artificially. Examples of naturally occurring polyamides are proteins, such as wool and silk. Artificially made polyamides can be made through step-growth polymerization or solid-phase synthesis yielding materials such as nylons, aramids, and sodium polyaspartate. Synthetic polyamides are commonly used in textiles, automotive industry, carpets, kitchen utensils and sportswear due to their high durability and strength. The transportation manufacturing industry is the major consumer, accounting for 35% of polyamide (PA) consumption.

All polyamides are made by the formation of an amide function to link two molecules of monomer together. The monomers can be amides themselves (usually in the form of a cyclic lactam such as caprolactam), α , ω -amino acids or a stoichiometric mixture of a diamine and a diacid. Both these kinds of precursors give a homopolymer. Polyamides are easily copolymerized, and thus many mixtures of monomers are possible which can in turn lead to many copolymers. Additionally many nylon polymers are miscible with one another allowing the creation of blends.

Production of polymers requires the repeated joining of two groups to form an amide linkage. In this case this specifically involves amide bonds, and the two groups involved are an amine group, and a terminal carbonyl component of a functional group. These react to produce a carbon-nitrogen bond, creating a singular amide linkage. This process involves the elimination of other atoms previously part of the functional groups. The carbonyl-component may be part of either a carboxylic acid group or the more reactive acyl halide derivative. The amine group and the carboxylic acid group can the same monomer, or polymer can be constituted be on the of two different bifunctional monomers, one with two amine groups, the other with two carboxylic acid or acid chloride groups.

The condensation reaction is used to synthetically produce nylon polymers in industry. Nylons must specifically include a straight chain (aliphatic) monomer. The amide link is produced from an amine group (alternatively known as an amino group), and a carboxylic acid group. The hydroxyl from the carboxylic acid combines with a hydrogen from the amine, and gives rise to water, the elimination byproduct that is the namesake of the reaction.

As an example of condensation reactions, consider that in living organisms, Amino acids are condensed with one another by an enzyme to form amide linkages (known as peptides). The resulting polyamides are known as proteins or polypeptides. In the diagram below, consider the amino-acids as single aliphatic monomers reacting with identical molecules to form a polyamide, focusing on solely the amine and acid groups. Ignore the substituent R groups – under the assumption the difference between the R groups are negligible:

Polyamide is common in textiles like clothing and carpets. It also often features in the production of items that require both strength and flexibility, including fishing line, electrical connectors, gears, guitar picks and strings and medical implants.

Industrial polyamide cable protection systems are generally superior in performance to the more common PVC-jacketed metallic conduits. The polyamide systems used in cable protection are highly engineered and specially modified for high impact resistance and flexibility. They also provide reduced assembly times and greater convenience.

Globally, polyamide cable protection systems are standard in the **manufacturing**, **rail and transit** and wind industries. In the United States, though, this technology has been slower to catch on, and many electrical and mechanical engineers lack training in its advantages and uses.

These are broadly classified under H. S. Code 3908.

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2021 Rank Countries 2018 2019 2020 Value Value Share Value Value Share Share Share (million \$) (%) (million\$) (%) (million\$) (%) (million\$) (%) China 57.90 11.46 55.72 15.33 202.77 28.66 351.52 44.76 1. 2. Korea RP 70.04 13.86 43.57 11.99 74.90 10.59 73.43 9.35 9.23 38.76 3. USA 46.67 10.67 52.33 7.40 61.02 7.77 132.30 26.18 12.32 56.05 4. Taiwan 76.80 21.13 87.15 7.14 Thailand 26.78 5.30 26.50 7.29 48.45 6.85 50.63 6.45 5. Russia 67.31 13.32 39.68 10.92 94.83 13.40 41.38 5.27 6. 29.38 7. Belgium 22.28 4.41 15.14 4.16 23.50 3.32 3.74 2.76 15.48 4.26 19.54 2.76 19.50 2.48 8. Japan 13.96 Vietnam 0.09 0.02 0.03 0.01 22.38 3.16 14.18 1.81 9. 10. Germany 13.50 2.67 8.76 2.41 13.87 1.96 13.69 1.74 Others 54.49 42.99 11.83 67.83 9.59 74.62 9.50 10.78 Total 505.32 100 363.41 100 707.56 100 785.39 100

India's Top 10 Sources of Polyamide in Primary Forms (HS Code : 3908)

Source: DGCI&S

Note : India's Import including re-import

There were so many countries India has imported Polyamide in Primary Forms from. The Polyamide in Primary Forms import in 2022 stood at US \$ 785.39 million and US \$ 707.56 Million in 2021. The Polyamide in Primary Forms import to India reached pick with worth value of US \$ 785.39 million in the year 2022. Major three source countries of Polyamide in Primary Forms to India in 2022 are China (US \$ 351.52 Million), Korea Rp (US \$ 73.43 Million) and USA (US \$ 61.02 Million). These 3 countries in total sold US \$ 485.97 Million of Polyamide in Primary Forms to India which rounds up to 61.88% share of the total or 61.88% share import into India.

	world rop to importer of rolyanide in rinnary rollins (115 Code : 5906)										
Rank	Countries	2017		2018		2019		2020	1		
		Value	Share	Value	Share	Value	Share	Value	Share		
		(million \$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)		
1.	Germany	1766.43	11.58	1390.37	11.19	2223.11	12.06	2277.70	13.41		
2.	China	2380.34	15.60	2057.38	16.56	2531.73	13.73	2233.48	13.14		
3.	Italy	752.87	4.93	650.66	5.24	985.03	5.34	1105.34	6.51		
4.	USA	661.13	4.33	505.77	4.07	726.34	3.94	869.30	5.12		
5.	Mexico	639.94	4.19	540.84	4.35	702.42	3.81	837.84	4.93		
6.	India	505.15	3.31	363.49	2.93	708.11	3.84	783.72	4.61		
7.	France	554.85	3.64	459.22	3.70	658.59	3.57	742.94	4.37		
8.	Japan	711.43	4.66	488.10	3.93	783.31	4.25	701.87	4.13		
9.	Rep of Korea	575.87	3.77	400.64	3.22	678.41	3.68	661.61	3.89		
10.	Poland	378.89	2.48	336.73	2.71	475.69	2.58	550.62	3.24		
	Others	6333.62	41.50	5232.75	42.11	7960.99	43.19	6226.85	36.65		
	Total	15260.51	100	12425.93	100	18433.72	100	16991.26	100		

13 Table – 2 World Top 10 Importer of Polyamide in Primary Forms (HS Code : 3908)

Source :**UNComtrade**

The worth value of global Import of Polyamide in Primary Forms US \$16.99 Billion in 2022, which was fallen down by US \$ 1.44 Billion from 2021. The top five importers of Polyamide in Primary Forms in 2020 were Germany(US \$ 2.28 B), China (US \$ 2.23 B), Italy (US \$ 1.10 B), USA (US \$ 869.30M) and Mexico (US \$ 837.84 M), accounted for 13.41%, 13.14%, 6.51%, 5.12% and 4.93% respectively of world import value of Polyamide in Primary Forms. The import value of Polyamide in Primary Forms into **India** amounted to US \$ 783.72 million in the year 2020, and ranked in 6th position in the world with the share of 4.61% share of total Global import value of Polyamide in Primary Forms. This was decrease from the previous year.

Perfumes or Toilet Water

The solutions, generally known as perfumes but also called extraits, extracts, or handkerchief perfumes, contain about 10–25 percent perfume concentrates. The terms toilet water and cologne are commonly used interchangeably; such products contain about 2–6 percent perfume concentrate.

perfume, fragrant product that results from the artful blending of certain odoriferous substances in appropriate proportions. The word is derived from the Latin *per fumum*, meaning "through smoke." The art of perfumery was apparently known to the ancient Chinese, Hindus, Egyptians, Israelites, Carthaginians, Arabs, Greeks, and Romans. References to perfumery materials and even perfume formulas are found in the Bible.

Raw materials used in perfumery include natural products, of <u>plant</u> or animal origin, and <u>synthetic</u> materials. <u>Essential oils</u> (*q.v.*) are most often obtained from plant materials by steam <u>distillation</u>. Certain delicate oils may be obtained by <u>solvent</u> extraction, a process also employed to extract waxes and perfume oil, yielding—by removal of the solvent—a solid substance called a concrete. Treatment of the <u>concrete</u> with a second substance, usually alcohol, leaves the waxes undissolved and provides the concentrated <u>flower</u> oil called an absolute. In the extraction method called <u>enfleurage</u>, <u>petals</u> are placed between layers of purified animal fat, which become saturated with flower oil, and alcohol is then used to obtain the absolute. The <u>expression</u> method, used to recover citrus oils from <u>fruit</u> peels, ranges from a traditional procedure of pressing with sponges to mechanical maceration. Individual <u>compounds</u> used in perfumery may be isolated from the essential oils, usually by distillation, and may sometimes be reprocessed to obtain still other perfumery chemicals.

Perfumes are usually alcoholic solutions. The solutions, generally known as perfumes but also called extraits, extracts, or handkerchief perfumes, contain about 10–25 percent perfume concentrates. The terms toilet water and <u>cologne</u> are commonly used interchangeably; such products contain about 2–6 percent perfume concentrate. Originally, eau de cologne was a mixture of citrus oils from such fruits as lemons and oranges, <u>combined</u> with such substances as lavender and neroli (orange-flower oil); toilet waters were less concentrated forms of other types of perfume. Aftershave lotions and splash colognes usually contain about 0.5–2 percent perfume oil. Recent developments include aerosol sprays and highly concentrated bath oils, sometimes called skin perfumes.

Perfumes employed to scent soaps, talcums, face powders, deodorants and antiperspirants, and other <u>cosmetic</u> products must be formulated to avoid being changed or becoming unstable in the new medium. They must also be formulated so as to avoid unacceptable alterations in the colour or consistency of the product.

These are broadly classified under H. S. Code - 3303.

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2019 2020 Rank Countries 2021 2022 Value Value Value Share Share Share Value Share (million \$) (%) (million\$) (%) (million\$) (%) (million\$) (%) 31.34 UAE 9.88 8.91 4.56 10.27 12.06 17.27 48.90 1. 27.58 19.46 17.67 2. France 26.23 23.64 13.53 30.46 27.87 13.61 12.26 7.81 17.59 8.91 12.76 17.85 11.44 3. Spain 0.18 12.34 4. Oman 0.11 0.10 0.09 0.20 0.26 7.91 5. 1.95 5.32 10.26 Singapore 6.13 5.53 4.40 7.62 6.58 7.20 6.99 6. Italy 8.32 7.50 3.20 10.01 8.00 5.13 7. Netherland 0.55 0.49 0.11 0.24 1.21 1.73 7.52 4.82 8. Switzerland 7.74 6.97 1.87 4.20 1.25 1.79 4.94 3.17 9. Indonesia 0.03 0.02 0.12 0.28 0.12 0.17 4.83 3.09 10. Belgium 2.37 2.13 0.89 2.01 2.05 2.93 3.56 2.28 35.99 10.29 12.27 Others 32.44 23.15 17.58 10.27 6.58 69.82 Total 110.95 100 44.43 100 100 156.06 100

 Table - 1

 India's Top 10 Source Countries of Perfume orToilet Water (HS Code : 3303)

Source: DGCI&S

Note : India's Import including Re-import

The value of imports of Perfumes or Tilet water to India totalled US\$ 156.06 million in 2022. Sales of Perfumes or Tilet water to India increased by almost 2.5 times in value terms compared to 2021. Major five source countries of Perfumes or Tilet water to India in 2022 were U A E (US \$ 48.90 Million), France (US \$ 27.58 Million), Spain (US \$ 17.85 Million), Oman (US \$ 12.34 Million) and Singapore (US \$ 10.26 Million). These 5 countries in total exported US \$ 116.93 Million value of Perfumes or Tilet water to India which rounds up to 74.94% of the total Perfumes or Tilet water import into India.

	word rop to importer of retruine of Tollet Water (IIS Code: 5505)										
Rank	Countries	2019)	2020		2021		2022			
		Value	Share	Value	Share	Value	Share	Value	Share		
		(million\$)	(%)	(million\$)	(%)	(million\$)	(%)	(million\$)	(%)		
1.	USA	2473.17	12.48	2139.56	12.90	3091.97	14.50	3787.56	18.11		
2.	Germany	1736.38	8.76	1320.32	7.96	1595.89	7.49	1704.82	8.15		
3.	Netherlands	772.92	3.90	767.87	4.63	874.78	4.10	1459.51	6.98		
4.	UK	1161.84	5.86	1009.39	6.08	1015.73	4.76	1181.24	5.65		
5.	China	559.04	2.82	747.65	4.51	1091.61	5.12	1147.89	5.49		
6.	Spain	839.37	4.24	611.27	3.68	843.46	3.96	1035.35	4.95		
7.	Singapore	841.51	4.25	650.28	3.92	858.00	4.02	945.74	4.52		
8.	Italy	598.06	3.02	491.16	2.96	654.13	3.07	719.46	3.44		
9.	Czechia	561.89	2.84	580.89	3.50	667.70	3.13	709.68	3.39		
10.	Poland	415.02	2.09	426.05	2.57	501.69	2.35	541.53	2.59		
27.	India	110.54	0.56	44.08	0.27	69.81	0.33	159.25	0.76		
	Others	9857.31	49.74	7844.98	47.29	10123.15	47.49	7678.65	36.72		
	Total	19816.51	100	16589.41	100	21318.11	100	20911.43	100		

16 Table - 2 World Top 10 Importer of Perfume or Toilet Water (HS Code : 3303)

Source : UNComtrade

The <u>imports</u> of the world's three major importers of Perfumes or Tilet water, namely USA, Germany and Ntherlands, represented the top 3 importers in the world in 2022. In value terms, USA (US 3.79 B), Germany (US 1.70 B) and Netherlands (US 1.46 B) constituted the countries with the highest levels of imports in 2022, together accounting for 33.24% share of global imports of Perfumes or Tilet water. India experienced the highest growth rate of the value of imports, among the main importing countries and ranked in 27th position in the world with 0.76% share of Global import of Perfumes or Tilet water in 2022.